

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ASSISTANT SECRETARY FOR HOUSING-FEDERAL HOUSING COMMISSIONER

Series and Series Number:

(Supersedes issue dated
January 23, 1993)

MATERIALS RELEASE NO. 411f

ISSUE DATE: October 8, 1996

REVIEW DATE: October 8, 1999

TO: DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

SUBJECT: 1. Product

Citadel Prefinished Siding/Panel 15™

2. Name and Address
of Manufacturer

Citadel Architectural Products, Inc.
3131-A North Franklin Road
Indianapolis, IN 46226

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, approval or acceptance by HUD of the described product, and any statement or representation, however made, indicating such approval, endorsement or acceptance by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: Exterior panel for walls and mansards with a slope not exceeding 25° from the vertical.

DESCRIPTION:

Panels are 5/16" (nominal) in thickness, by 4' x 8', 4' x 10', 4' x 12', 5' x 8' and 5' x 10'. Aluminum accessories necessary for installation are furnished with the panels. Panels consist of a core 5/16" C-C grade, plugged (GROUP 1 EXT-APA PS 1-95) plywood to which is bonded an exterior facing of .010" (nominal) pebble-textured sheet aluminum and a balancing backing of .004" (nominal) aluminum reflective foil. Total nominal panel thickness is 0.312". Exterior type adhesive is used for this bonding.

The pebble-textured exterior aluminum surface is painted with a thermoset polyester finish. These are available in five stock and ten special order colors. Custom colors are available through inquiry to the manufacturer.

A complete line of painted, color matched moldings are available in both roll-formed and extruded aluminum. Profiles available in .024" roll-formed aluminum are: H-mold, J-mold, Z-mold, water table, brick mold, corner cap, and surface mounted snap on battens. Extruded profiles are: H-mold, J-mold, inside corner and outside corner. Two piece "snap-on" moldings are also available. Molding Lengths are 8' and 10'.

REQUIREMENTS:

Plywood shall be 5/16" thick and conform to PS-1 95, Group 1, C-C (plugged), Exterior type.

The aluminum face shall be pebble-textured, 0.010" thick, alloy 3105-H14. The aluminum back shall be 0.004" thick fiberglass reinforced aluminum foil. The adhesive for the aluminum face and back shall meet or exceed ASTM D-2559-84 (1992).

INSTALLATION:

Installation shall be in accordance with Citadel Application Instructions Panel 15™, PW 902 and the following:

Panels shall span at least three studs. The maximum spacing of studs or other supports shall be 24" o.c. All panel joints shall be on framing members. The walls may be sheathed or unsheathed.

Use 8d annular ring aluminum nails (Citadel designation N-575) supplied by Citadel. Space the nails a maximum of 6" o.c. at the panel edges, and a maximum of 24" on intermediate members.

Panels installed in accordance with these requirements satisfy the HUD requirements for a braced wall section in new construction. When horizontal shear forces caused by wind and earthquake are calculated, an allowable shear resistance of 188 lbs. per linear foot of wall is permitted for the panels extending the full height of the studs, and spanning at least three studs.

For glue-nailing, use a construction adhesive recommended by Citadel and meeting the requirements of Use of Materials Bulletin No. 60, Field Glued Plywood and Wood Frame Floor System. Space nails 24" o.c. at the panel edges, and provide aluminum finish nails on intermediate supports as needed. The adhesive manufacturer's recommendations should be carefully followed.

A vapor barrier having an installed water vapor transmission rate not exceeding 0.5 perm shall be provided on the warm side of all closed exterior walls. Provide at least 0.30 square inches of ventilation to the outside at the top and bottom of each stud space.

Space panels a minimum of 1/16" at the panel ends and edges.

Caulk all joints with a high performance sealant recommended by Citadel.

Paint the bottom edges of panels which are exposed to the weather. Use two coats of a heavy aluminum paint, or two coats of a top quality solvent base exterior paint.

LIMITATIONS:

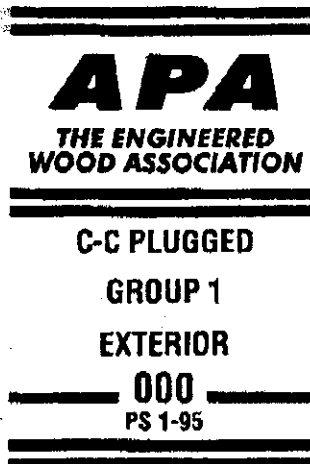
Panel 15™ is not recommended for use in areas of heavy industrial pollution, or where it is exposed to salt spray.

CERTIFICATION AND IDENTIFICATION:

Citadel Architectural Products, Inc. shall certify that each Panel 15™ panel meets the requirements of this Materials Release (MR). The American Plywood Association (APA) shall validate the manufacturer's certification that the plywood panels meet the requirements of this MR. Each plywood panel, certified as conforming with this MR, shall be marked with the following information:

- a. the manufacturer's identification by assigned mill number.
- b. The registered APA mark.
- c. PS 1-95, Group 1, C-C (plugged) EXT.
- d. MR 411f.

SAMPLE STAMP:



WARRANTY

Citadel Architectural Products, Inc. shall provide the owner with the following limited warranty:

PERFORMANCE OF PANELS

Panel 15™ is warranted to be free from delamination (glue-line separation) for the life of original installation. Should the product not comply with this warranty, Citadel will, at its option, repair defective panels in place, furnish and install replacement panels, or make a fair allowance thereof.

PERFORMANCE OF FINISH:

The finish on Panel 15™ is warranted to be free from defects in materials (peeling, blistering, checking and flaking of paint film) for 15 years from original installation. Should the finish not comply with this warranty, Citadel will, at its option, refinish defective panels in place, furnish and install replacement panels, or make the following allowances: 100 percent of the reasonable cost of labor and materials for defects occurring within the first five years after installation, and for a prorated share of the reasonable costs of labor and materials thereafter (ranging from 90 percent in year six to 10 percent in years 14 and 15).

CONDITIONS:

Citadel must be given written notice within 90 days after discovery of defective panels, and a reasonable opportunity to inspect the panels prior to alteration or repair.

EXCEPTIONS:

The warranty does NOT cover:

1. Installation or maintenance not complying with Citadel's Panel 15™ Installation Instructions, PW-902. (Obtain PW-902 in shipping units, from sales representative or by writing to the service address.)
2. Damage from abuse, abrasion, impact or other physical force.
3. Corrosion by moisture/vapor intrusion or entrapment. (See installation instructions on proper caulking, joint sealing, etc.)

4. Exposure to salt spray, chemical atmospheres or industrial pollution.
5. Installation at more than 25 degrees from vertical in mansard or similar exterior locations.
6. Gradual changes in color value due to weathering.

WARRANTY COVERAGE:

Warranty applies only to installations in continental United States and Canada (specially prepared warranties can be extended elsewhere). Purchasers of Panel 15™ from Citadel automatically receive this warranty. It may be extended upon resale of the product or of property to which the product is attached, in which case claims must be processed through the intermediate parties.

This warranty requires strict compliance with Citadel's installation and maintenance instructions, and conditions and exceptions herein noted. Citadel is not responsible for damage or unsatisfactory performance caused by others. Its sole responsibility is as stated herein, and it shall not be liable for consequential, indirect or incidental damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights; and you may also have other rights that vary from state to state.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.

4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of the MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fees shall be sent to:

U. S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P. O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be cancelled when:

- 1) conditions under which the documents were issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product or system.
- 2) the manufacturer has changed its organizational form without notifying HUD.
- 3) the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice, of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made for a canceled document.

This Materials Release is issued solely for the captioned firm, and
is not transferable to any person or successor entity.
